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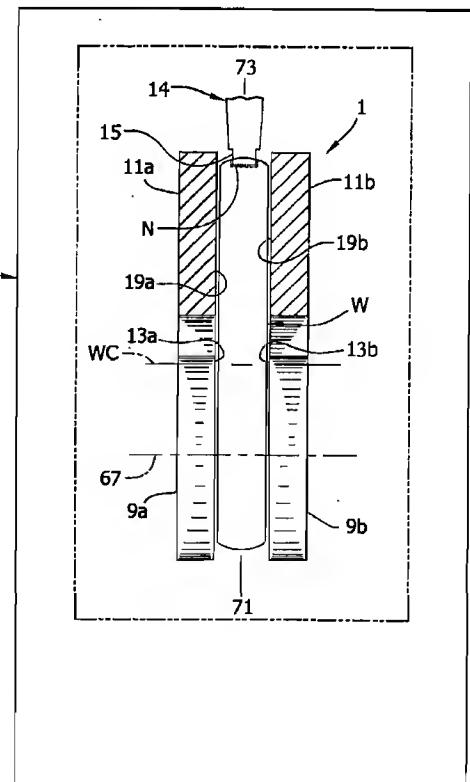
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(54) Title: **WAFER CLAMPING DEVICE FOR A DOUBLE SIDE GRINDER**



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(57) Abstract: A hydrostatic pad for use in holding a semiconductor wafer during grinding of the wafer by grinding wheels. The pad includes hydrostatic pockets formed in a face of the body directly opposed to the wafer. The pockets are adapted for receiving fluid through the body and into the pockets to provide a barrier between the body face and the workpiece while still applying pressure to hold the workpiece during grinding. The hydrostatic pads allow the wafer to rotate relative to the pads about their common axis. The pockets are oriented to reduce hydrostatic bending moments that are produced in the wafer when the grinding wheels shift or tilt relative to the hydrostatic pads, helping prevent nanotopology degradation of surfaces of the wafer commonly caused by shift and tilt of the grinding wheels.



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